

PATENT SPECIFICATION

DRAWINGS ATTACHED

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COMPLETE SPECIFICATION

Improvements in or relating to Vehicle Seats

5 We, REGIE NATIONALE DES USINES RENAULT, a French Corporation, of 8/10 Avenue Emile Zola, Billancourt (Hauts de Seine), France, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

10 The present invention relates to a vehicle seat of the kind having a seat portion proper, a back with a rigid frame and a head-rest which is adjustably mounted on an upper portion of the seat back frame.

15 It is known that increased use of motor vehicles for travelling on long-distance journeys has led drivers to arrange, at least on the back of the front seat beside the driver's seat, a head-rest permitting the passenger occupying this seat to relax his muscles. 20 However, this otherwise very practical head-rest becomes useless and a great hindrance for short journeys, hindering visibility towards the rear and consequently prejudicing the satisfactory driving of the vehicle, particularly in towns. As a result if the head-rest is detachable, as is generally the case, drivers tend to remove it from the seat back and stow it away, these operations involving a loss of time and occupying some of the useful space available in the vehicle. 30

The present invention makes it possible to obviate these disadvantages.

35 Accordingly the present invention provides a vehicle seat of the kind having a seat portion proper, a back with a rigid frame, and a head-rest which is adjustably mountable on an upper portion of the seat back frame, wherein said head-rest is arranged for pivotal movement relative to the seat back frame between operative positions in upward extension of the seat back and a stowed position overlapping the rear upper portion of the seat back, and 40

has a concave face shaped to mate snugly against said rear upper seat portion in the stowed position, and wherein releasable means is provided for selectively locking said head-rest in said positions. 45

For a better understanding of the present invention and to show how the same may be carried into effect reference will now be made by way of example to the accompanying drawing in which:— 50

Figure 1 is a perspective view of a vehicle seat having a head-rest shown in an operative position, 55

Figure 2 is a view similar to Figure 1, showing the head-rest in a stowed position, 60

Figure 3 shows in perspective the top of the framework of the seat and head-rest shown in Figures 1 and 2, 65

Figure 4 is a view to a larger scale of the portion IV surrounded in dot-dash lines in Figure 3, 70

Figure 5 illustrates a variant of the element shown in Figure 4 and 75

Figure 6 is an end view of Figure 5.

Referring now to Figures 1 and 2 of the drawing, a front seat of a vehicle such as a motor vehicle is shown. This seat of the invention comprises a seat portion proper in the form of a cushion 4 on which a passenger in the vehicle rests, a seat back 5 provided with upholstery 3 and equipped with a rigid inner frame 1 (Figure 3) preferably consisting of metal tubes 2 and a head-rest 8. 75 The upper portion 6 of the seat back 5 conveniently has towards the rear thereof a rounded protective ridge 7 which is intended to avoid bruising or injuring passengers sitting in the back of the vehicle in the event of a collision or excessively sudden braking. 80 The head rest 8 is adjustably and pivotally mounted on this portion 6 for pivotal movement relative to the seat back frame 1 be-

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tween operative positions in which the head rest forms an upward extension of the seat back (Figure 1) and a stowed position in which the head rest overlaps the rear upper portion 6 of the seat back (Figure 2) with various intermediate positions also being possible.

The head-rest 8, as shown in Figure 3 has parallel faces which are respectively convex and concave, and includes a rigid internal frame 9 which is parallel to said parallel faces and U-shaped with parallel arms 10 arcuately curved and fixed at their free ends to a horizontal tubular element 11 which is disposed parallel to the base 12 of the frame and which is provided at its ends with plugs 13 (Figures 4 and 5). The plugs 13 are hollow and externally conical and are retained for example by force fitting them into the tubular element 11. The tubular element and the frame 9 are covered with an upholstery 14 (Figure 3).

Furthermore, the head rest assembly includes straps 15 which are preferably vertical and are bent forwardly. The head-rest 8 is mounted on the seat by means of these straps 15 which are securable to the internal frame 1 of the seat back 5, for example, on a horizontal tube 2 provided for this purpose with spacer elements 16 which are sufficiently long to finish flush with the surface of the upholstery 3 covering the seat. Bearings 17 (Figures 4 and 5) fixed to the straps 15 and provided opposite the plugs 13 with female conical portions, support a pivot shaft 18 extending through the element 11 and the plugs 13. Releasable means for selectively locking the head-rest 8 in said predetermined positions, is provided in the form of knurled or serrated nuts 19 (Figures 3 and 4) which are screwed on to threaded ends 18a of the shaft 18, so that the bearings 17, plugs 13 and element 11 may be clamped between the nuts 19 (Figure 3).

A passenger sitting on a seat of the invention can regulate the head-rest 8 to the particular height and inclination most suited to his physical build. It will also be noted that when this head-rest 8 is in the stowed position (Figure 2) the concave face thereof mates snugly against the rear upper portion of the seat back 5 and the rounded protective ridge 7, at the rear upper portion of the seat back 5. Thus in the stowed position the head-rest does not hinder either the passengers in the rear seats or the driver's vision towards the rear of the vehicle.

It will be understood that the form of embodiment and more particularly the means for pivotably mounting and locking the head-rest, as described hereinbefore, are not intended to limit the invention and that any desirable constructional modifications could be made thereto without thereby departing from the scope of the invention.

In order to illustrate this remark, it should be noted that the releasable locking means can alternatively be in the form of eccentric cams 20 (Figures 5 and 6) which are provided with a handle 21 and which are pivotably mounted on the shaft 18. These cams are arranged to abut on the outer faces of the bearings 17 to clamp the bearings 17, plugs 13 and element 11 between the cams 20. Furthermore, if the back 5 of the seat does not comprise a protective ridge 7, the convex face of the head-rest 8 acts as a safety facing on the rear upper portion of the seat back when the head rest is in the stowed position.

WHAT WE CLAIM IS:—

1. A vehicle seat of the kind having a seat portion proper, a back with a rigid frame, and a head-rest which is adjustably mounted on an upper portion of the seat back frame, wherein said head-rest is arranged for pivotal movement relative to the seat back frame between operative positions in upward extension of the seat back and a stowed position overlapping the rear upper portion of the seat back, and has a concave face shaped to mate snugly against said rear upper seat portion in the stowed position, and wherein releasable means is provided for selectively locking said head-rest in said positions.

2. A vehicle seat according to claim 1, wherein the head-rest is upholstered, has a convex face which is parallel to said concave face, and has an internal frame which is parallel to said parallel faces, so that the convex face of the head-rest faces forwardly of the seat in said operative position, and wherein the rear upper portion of the seat back has a rounded protective ridge against which the concave face of the head-rest fits snugly in the stowed position.

3. A vehicle seat according to claim 2, wherein the head-rest frame is substantially rigid and U-shaped with two curved parallel arms fixed at their free ends to a horizontal element which is disposed parallel with the base of the head rest frame, and which is mounted pivotably in bearings fixed to straps, said straps being on the seat back frame.

4. A vehicle seat according to claim 3, wherein the horizontal element is provided with hollow end plugs which are externally conical and which fit respectively in female conical portions of said bearings there being a shaft extending through the horizontal element through the plugs and through said bearings which is provided with said releasable means for selectively locking said head-rest in said positions.

5. A vehicle seat according to claim 4, wherein said releasable locking means includes nuts screwed on to threaded ends of the shaft and arranged to clamp the bear-

ings, plugs, and horizontal element there-between.

5 6. A vehicle seat according to claim 4, wherein, said releasable locking means includes cams arranged on the ends of the shaft for operation to clamp the bearings, the plugs, and the horizontal element there-between.

10 7. A vehicle seat according to any one of claims 2 to 6, wherein the convex face of the head-rest is adapted to form a safety facing on the rear upper portion of the seat

back in the stowed position of the head rest.

8. A vehicle seat having a head-rest substantially as hereinbefore described and as shown in Figures 1 to 4 or Figures 1 to 3 as modified by Figures 5 and 6 of the accompanying drawing. 15

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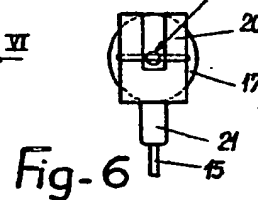
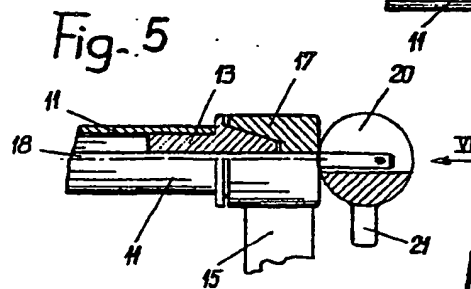
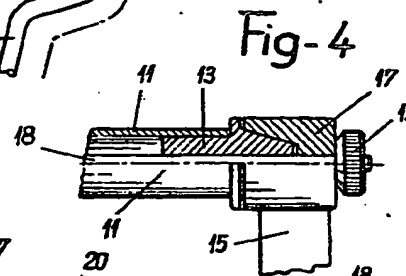
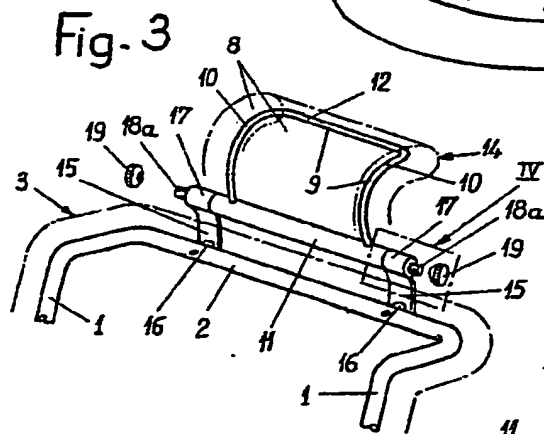
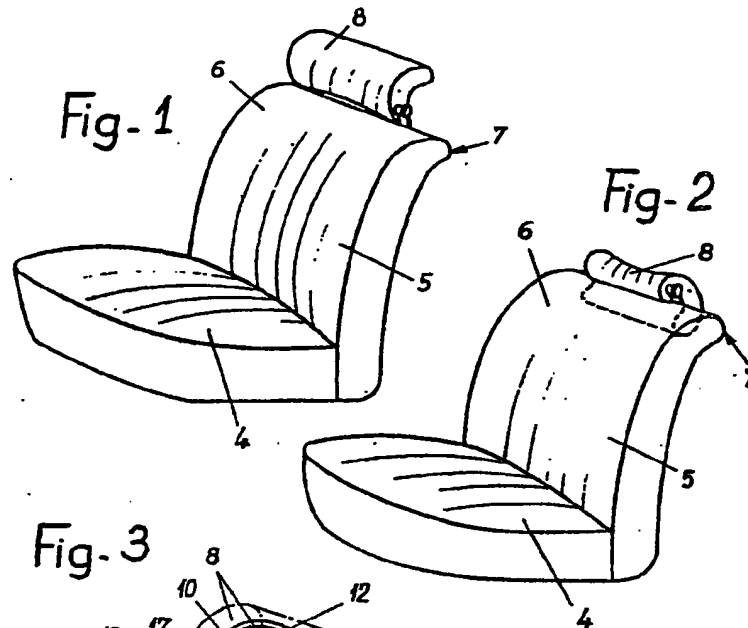
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COMPLETE SPECIFICATION

1 SHEET

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